REPCO

PRODUCT DESCRIPTION

Repco 1101 Engineering Grade Fluid is a two component solvent free epoxy metal repair Fluid. The product has been designed for use on a wide range of metallic surfaces and once cured is readily machinable

TYPICAL APPLICATIONS

The product is suitable for filling mechanically or abrasive blast cleaned surfaces where excessive pitting and scarring has been caused by corrosion or chemical attack. The material can also be used with aluminium oxide aggregates to create anti-slip finishes on metallic surfaces such belt rollers, brake test rollers and steps.

GENERAL PRODUCT INFORMATION

Appearance

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Base:	Dark Grey Paste			
Activator:	Amber Fluid			
Mixed:	Mid Grey Fluit			
Mixing Ratio				
By weight:	8:1			
By volume:	3:1			
Density				
Base:	2.70			
Activator:	1.00			
Mixed:	2.50			
Volume Capacity				
440cc/Kg				
Solids content				
100%				
100/0				
Slump Resistance				
Nil at 3mm				

Working life

10°C	50-60 minutes
20°C	25-30 minutes
30°C	15-20 minutes

Cure Times

Once hardened, material should be left for the following periods of time at 20°C before being subjected to the conditions indicated. These times will be doubled at 10° C and halved at 30° C.

Temperature	Movement without load or immersion	Machining and light loading	Full mechanical Loading	Full Immersion
10°C/50F°	3 Hours	4 Hours	4 Days	6 Days
20°C/68F°	1 ¹ / ₂ Hours	2 Hours	2 Days	3 Days
30°C/86F°	45 Mins	1 Hours	1 Day	2 Days
40°C/104F°	20 Mins	30 Mins	16 Hours	1 Day

Coverage Rate

1Kg will cover 0.4 sq metres at a nominal thickness of 1mm.

Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.

Storage life

The shelf life of the product is typically 5 years if unopened and stored in cool dry conditions (15-30°C/ 60-86F°). Once opened replace the lid firmly and store as above.

CHEMICAL RESISTANCE

The product resists attack by a wide variety of inorganic acids, alkalies, salts and organic media. Refer to the Resimac Technical Centre for advice.

HEAT RESISTANCE

Heat Distortion Temperature (HDT)

Tested to ASTM D648 (264 psi fibre stress), typical values are:

Cure Temperature	HDT
20°C Cure	58°C
100°C Cure	98°C

Heat Resistance

Suitable for long term water immersion at temperatures up to 70°C and intermittent contact with pressurised steam up to 120°.

Resistant to dry heat in excess of 200°C dependent on load.

MECHANICAL PROPERTIES

Testing is typically done under laboratory conditions at a temperature of 20°C unless otherwise specified.

Adhesion

Tensile Shear when tested in accordance with ASTM D1002 on abrasive blasted mild steel with a 75 micron profile will typically be:

185kg/cm² 2,630 psi 18.1 MPa

Compressive strength

When tested in accordance with ASTM D 695, typical values will be:

1075kg/ cm² 15,300psi 105.5 MPa

Corrosion Resistance

When tested in accordance with ASTM B117 the material shows no sign of corrosion after:

Minimum 5000 hours Exposure

Flexural Strength

When tested in accordance with ASTM D790 typical values will be:

703kg/cm² 10,000psi 68.9 MPa

Hardness

Rockwell R

Tested to ASTM D785 typical value will be: 100

Shore D

Tested to ASTM D2240 typical value will be: 86

TECHNICAL SUPPORT

Zoom Corrosion Technology offer complete technical support and assistance, from discussing application requirements to training approved local contractors. For further information please contact a REPCO representative or your nearest REPCO authorised dealer.

HEALTH AND SAFETY

Please refer to the product safety data sheet for detailed information on handling, storage, shipping and disposal.

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